

Multiple organizational identification levels and the impact of perceived external prestige and communication climate

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Summary

Earlier studies have shown that perceived external prestige and communication climate influence organizational identification. In this paper we present the results of a study of the influence of communication climate and perceived external prestige on organizational identification at various organizational levels of a regional police organization. In total, 314 respondents filled out a questionnaire on communication climate, perceived external prestige and organizational identification. The results of this study show that communication climate has the strongest link with employee identification when it concerns the identification with the daily work group and a weaker one with the organization as a whole. It also appears that perceived external prestige has a stronger influence on the identification with the organization as a whole than on the identification at the more concrete organizational levels (such as department or work group). This research offers reasons to presuppose that organizational identification and communication climate are multiple constructs. If management wishes to influence organizational identification through a bottom-up process, it is wise to pay particular attention to the communication climate in the work groups. Influencing organizational identification with the organization as a whole is better conducted through perceived external prestige. Copyright © 2006 John Wiley & Sons, Ltd.

Introduction

Someone's identity is not solely defined by personal characteristics, but also determined by one's membership of groups or organizations (Tajfel & Turner, 1979). Tajfel (1972, p. 31) defined this as social identity, or 'the individual's knowledge that he (or she) belongs to certain groups together with some emotional and value significance to him (or her) of the group membership'. Social identity theory is based on the idea that individuals prefer membership of groups that are evaluated more positively in comparison with other potential social categories (cf. Haslam, 2004). This would enhance their personal identity and contribute positively to their self-esteem. The process through which the identity is formed as a function of group membership is termed *group identification*. With organizational identification this implies a specific form of identification with a (formal) group, often the organization or company where one is employed.

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A common definition of organizational identification is that of Mael and Ashforth (1992, p. 104), 'The perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization(s) in which he or she is a member'. The gist of this definition is that employees who feel one with the organization for which they work will also describe themselves in terms of the characteristics of the organization.

The degree to which employees truly feels part of the organization for which they work is a crucial factor in the successful running thereof. Time and again research has shown the importance of the degree to which employees identify themselves with their organization (Kreiner & Ashforth, 2004). Strong organizational identification leads, for example to a more positive attitude towards the organization (Ashforth & Mael, 1989), a higher worksatisfaction (Hall & Schneider, 1972; Van Dick et al., 2004a), a lower intention to leave the organization (Scott et al., 1999; Van Dick, Wagner, Stellmacher, & Christ, 2004b; Van Dick, Wagner, & Lemmer, 2004c), and even the willingness to make financial sacrifices (Mael & Ashforth, 1992). Also Dutton, Dukerich, and Harquail (1994) argue that when employees identify themselves with the organization, they will show behaviour that is conducive to the organization.

Besides the importance of organizational identification to organizations, much research attention has thus far been paid to the factors that influence the degree to which employees identify with an organization. Antecedents of organizational identification include perceived external prestige (Bhattacharya, Rao, & Glynn, 1995; Dutton et al., 1994; Smidts, Pruyn, & Van Riel, 2001), perceived distinguishing ability of the organization (Mael & Ashforth, 1992), the degree of contact between employee and organization (Hall, Schneider, & Nygren, 1970; Mael & Ashforth, 1992), and the degree of overlap between organizational identity and personal identity in the employees' perception (Bergami & Bagozzi, 2000; Elsbach & Bhattacharya, 2001).

In various studies, the importance of communication is emphasized as an antecedent of organizational identification (DiSanza & Bullis, 1999; Riordan & Weatherly, 1999; Scott, 1997) or commitment (e.g. Allen, 1992). Insight into *how* communication influences identification processes is still limited, however (Smidts et al., 2001; Wiesenfeld, Raghuram, & Garud, 1999). The impact of communication was initially and particularly studied in commitment research. These studies all appear to indicate a positive relationship between various dimensions of communication (climate) and organizational commitment (e.g. Guzley, 1992; Postmes, Tanis, & De Wit, 2001; Trombetta & Rogers, 1988). Although, theoretically speaking, identification and commitment are not per definition one and the same (Mael & Tetrick, 1992; Meyer, Becker, & Vandenberghe, 2004; Van Dick et al., 2004b; Van Knippenberg & Sleebos, 2005), they are strongly related constructs (e.g. Gautam, Van Dick, & Wagner, 2004; Harris & Cameron, 2005; Siegel & Sisaye, 1997; Witt, 1993). In a recently conducted meta-analysis of 96 studies (Riketta, 2005), a large amount of shared variance between both constructs was reported. We therefore decided to include empirical evidence on organizational commitment in our study.

To date, the majority of research on organizational identification has focused on the organization as a holistic construct. Smidts et al. (2001), for example address the influence of communication climate in the degree to which employees identify with the organization as a whole. Only a few recent studies on organizational identification view organizations as multiple entities (Foreman & Whetten, 2002; Johnson, 2002; Johnson, Morgeson, Ilgen, Meyer, & Lloyd, 2006; Larson & Pepper, 2003). In these studies the emphasis is on the importance of distinguishing between several organizational levels with which employees might identify themselves. Little is known about the relationship between internal communication and (perceived) external prestige on the one hand, and multiple identities in an organization on the other.

This present study thus addresses the questions (1) to what degree, and how differently, employees identify themselves with various organizational levels and (2) to what degree the identification on these

various levels is influenced by the communication climate of each level and/or the perceived external prestige. Whereas studies of the 'umbrella' organization have shown that communication climate and perceived external prestige are defining factors for the degree to which employees identify with the organization as a whole (Smidts et al., 2001), this study addresses the influence of communication climate and perceived external prestige on identification with various organizational levels.

Multiple Organizational Identities

Although little is still known about multiple organizational identities, the assumption that employees can identify with departments within their organization has been the focus of attention for quite some time (Albert & Whetten, 1985; Ashforth & Mael, 1989; Brickson, 2000; Pratt & Foreman, 2000; Rousseau, 1998). An organization can be seen as a melting pot of all kinds of sub-cultures and sub-identities. Ashforth and Johnson (2001) argue that it is partly due to modern working relations often being temporary (hence: job insecurity), that people are inclined to adopt all kinds of sub-identities. Although the concept that multiple identities in organizations actually exist is not new, empirical evidence for the relationships between these identities is limited (Foreman & Whetten, 2002) and not always unequivocal (Allen, 1996; Barker & Tompkins, 1994; Scott, 1997; Scott et al., 1999).

Multiple identities can manifest themselves in various ways in organizations. Identities can for example cut vertically through organizational levels, but might also manifest themselves in the form of the various organizational levels (Ashforth & Johnson, 2001). One example of a study based on the assumption of identities cutting right through the organization is that of Foreman and Whetten (2002). Respondents recognized two identities in their own organization and the overall branch organization to which they belonged, namely a family identity (with organizational characteristics such as traditions, symbols, ideology and altruism) and a business identity (with characteristics such as economic rationality, maximization of profit and self-interest). When identifying with the organization, it appeared that employees felt the urge to strengthen both the family and the business identity, whereas when identifying with the branch it was only the family identity that was emphasized. Foreman and Whetten (2002) concluded that there are sound reasons to assume that in organizations various identities are distinguished by employees.

Another study of the division of identities in organizational levels is by Reade (2001), who found that in a multinational organization local identification was influenced more by local determinants (e.g. support of the immediate superior, local prestige and local distinguishing factors) than by multinational (global) determinants. It also appeared that multinational identification was influenced more by multinational determinants than by local ones. At a global level, Reade found that in an international context local and 'umbrella' determinants influence local and umbrella identification, respectively. Whether such split organizational identities can also manifest themselves on a smaller scale, in a national context, does not become clear from her study. Also Scott (1997) conducted research on the division of identities in various organizational levels. Scott studies how strongly employees, divided into three different organizational levels, identified themselves with these levels. One expectation was that personnel would identify more strongly with the level in which they themselves worked than with the other organizational levels. This expectation proved to be only partly correct. Scott did actually establish several differences in the strength of employee identification with the three organizational levels. It also appeared, however, that all the respondents identified themselves equally strongly with the umbrella organizational level, and that there are strong positive correlations in employee identification across the different organizational levels. In several other studies (Bartels, Douwes, De

Jong, & Pruyn, 2006; Baruch & Winkelmann-Gleed, 2002; Scott et al., 1999; Van Knippenberg & Van Schie, 2000) it has since been shown that the stronger an employee identifies with a level in the organization, the stronger he or she also identifies with another organizational level.

There are, moreover, initial indications that the identification of employees with their closest organizational department (there where the daily duties are carried out) is experienced as being the most important (Moreland & Levine, 2001; Riordan & Weatherly, 1999; Van Knippenberg & Van Schie, 2000). Ashforth and Johnson (2001) call this 'identity salience' and posit that an identity is more visible when it is closer to the employee. In Van Knippenberg and Van Schie's study (2000) it not only apparent that identification was stronger with one's own work group than with the organization as a whole but also that work group identification was a better predictor of attitudes and behaviour (e.g. with regard to the organization. Also Bartels et al. (2006) and Riketta and Van Dick (2005) found that employees identified themselves more strongly with their own work group than with the organization as a whole. Riketta and Van Dick conducted a meta-analytical study on the impact of determinants of work group and organizational identification, in which they used data of 40 independent samples. They found that team-related variables, such as team climate perceptions, satisfaction with co-workers or supervisors and altruistic behaviours were closely related to work group identification, whereas satisfaction with the organization, organization-related extra-role behaviour or intentions to leave the organization, were more strongly related to organizational identification. Riketta and Van Dick (2005, p. 505) therefore concluded that 'the focus of attachment merits a central role in attempts to explain differences in work-related attitudes and behaviours. In general, associations are stronger when the foci of attachment and potential outcome match than when they do not'.

Perceived External Prestige and Organizational Identification

Perceived external prestige concerns employees' perception of how the outside world views their organization. Various authors have emphasized the importance of perceived external prestige (PEP) to the organization (Dutton & Dukerich, 1991; Dutton et al., 1994). A number of studies have shown a correlation between PEP and organizational identification (Bergami & Bagozzi, 2000; Carmeli, 2005; Carmeli & Freund, 2002; Iyver, Bamber, & Barefield, 1997; Mael & Ashforth, 1992; Smidts et al., 2001). These studies demonstrate that the more positively employees think that the status and prestige of their organization is viewed by the outside world, the more positive they are towards their organization and the stronger they identify with it. Furthermore, and in line with social identity theory, if organizational members see their organization as more respected or prestigious by important outsiders, organizational identification is more likely to take place, because it could increase someone's self-esteem (Dutton et al., 1994). Several researchers indeed found that the more prestigious employees perceive their organization, the greater the potential increase in self-esteem through identification (e.g. Bhattacharya et al., 1995; Fisher & Wakefield, 1998). One restriction of these studies, however, is that until now perceived external prestige has only been linked with the degree to which employees identify with the organization as a whole. On this subject, Carmeli (2005, p. 448) speaks of perceived external prestige as being 'a function of several criteria that represent the overall behaviour of the organization'. Carmeli thus approaches PEP as a global organizational construct. An area as yet uninvestigated is the influence of PEP on identification with underlying, more concrete organizational levels. Fisher and Wakefield (1998) propose that in order to influence employees' identification, organizations with a good reputation should emphasize on this, whereas organizations with less visibility should rather employ strategies to improve internal relationships between members. This enhances the idea that PEP

could be more closely related to overall organizational levels or the organization as a whole than to smaller work groups and departments that are less visible within the organization. Current study thus explores the multidimensional relationship between PEP and organizational identification at various organizational levels.

Communication Climate and Organizational Identification

According to Redding (1973), communication climate is crucial when creating an effective organization. A frequently used definition of communication climate is that of Dennis (1974, p. 29): 'A subjective experienced quality of the internal environment of an organization: the concept embraces a general cluster of inferred predispositions, identifiable through reports of members perceptions' of messages and message-related events occurring in the organization'. Communication climate can thus be defined as the perception of employees with regard to the quality of the mutual relations and the communication in an organization (Goldhaber, 1993). As a starting point for his research and to define the concept of communication climate and the related dimensions, Dennis posits that an ideal communication climate consists of eight dimensions: supportiveness, openness and candour, participative decision making, trust, confidence and credibility, high performance goals, information adequacy, semantic information difference, and communication satisfaction. His division is particularly and often used as a basis for further studies broaching the relationship between communication climate and *organizational commitment* (Allen, 1992; Allen & Brady, 1997; Guzley, 1992; Huff, Sproull, & Kiesler, 1989; Postmes et al., 2001; Putti, Aryee, & Phua, 1990; Treadwell & Harrison, 1994; Trombetta & Rogers, 1988; Varona, 1996; Welsch & LaVan, 1981). Studies in which the concept of communication climate is explicitly linked to *organizational identification* are rare (Bartels et al., 2006; Scott et al., 1999; Smidts et al., 2001). However, the findings of all of these studies do show that there is a positive relationship between communication climate and organizational identification (or commitment).

Some studies of the relationship between communication climate and *organizational commitment* or *organizational identification* have explored communication climate as a multidimensional construct, usually solely from the perspective of organizational commitment or identification with the organization as a whole. Seldom has research been conducted on the relationship between communication climate and commitment and identification at lower organizational levels (such as work groups, departments, business units or divisions). Falcione and Kaplan (1984) have already claimed that organizations have more sub-systems of, for example communication climate. They posit that the relationships between various constructs within an organization (such as communication climate, job satisfaction and productivity) should preferably be measured at the same level of analysis. If communication climate is measured at work group level, so should the identification of employees also be measured at that level. Furthermore, a large body of research into the relationships among co-workers (e.g. in workgroups)—conducted in the area of team-member exchanges (TMX; e.g., Seers, 1989; Seers, Petty, & Cashman, 1995)—supports the idea that teams in organizations are crucial for organizational success. Specifically, the fact that TMX is positively linked to social cohesion in groups (Jordan, Feild, & Armenakis, 2002), job performance and organizational commitment (e.g. Liden, Wayne, & Sparrowe, 2000), challenges the exploration of relationships between communication climate and employees' identification in such sub-units in the organization.

Hypotheses and Expected Model

This study presupposes that an identity in a specific organizational level is embedded in other more abstract levels of the organization (Ashforth & Mael, 1989; Dukerich, Golden, & Jacobson, 1996). Following Ashforth and Johnson (2001), the expectation is that there are both lower order identities (in this study *work group* and *department*) and higher order identities (in this context *business units* and *organizations as a whole*). These so-called ‘nested identities’ form ‘a means-end chain (March & Simon, 1958) in that a given identity is both the means to a higher order identity and the end of a lower order identity’ (Ashforth & Johnson, 2001, p. 32). In other words, the work group is part of the department, the department part of the business unit, and the business unit part of the organization. Lower order identities such as work group and department will generally be more visible and important than the more abstract identities such as business unit and organization (e.g. Kramer, 1991; Lawler, 1992; Scott, 1997). It is moreover expected that work group identification is experienced as the most visible (Van Knippenberg & Van Schie, 2000), thus forming the basis for identification with other organizational levels. Hence the following hypotheses were formulated on the basis of the aforementioned suppositions:

- (1a) Employee identification at work group level influences identification at department level, business unit level and organizational level.
- (1b) Employee identification at department level influences identification at business unit level and organizational level.
- (1c) Employee identification at business unit level influences identification at organizational level.

Furthermore, and following the suppositions above, it is expected that sub-identities (as manifested in organizational levels) perceived by employees to be closely related, will also be seen by them as similar. A possible consequence of this is that there will be a stronger correlation between more closely related sub-identities than when employees perceive sub-identities as being more separate. On the basis of these suppositions, the following hypothesis was formulated:

- (2) The relationship between identifications with more closely related organizational levels is stronger than the relationship between identifications with organizational levels that are further apart from each other.

On the basis of findings of Carmeli (2005) and Smidts et al. (2001), it can be concluded that perceived external prestige is connected with overall organizational identification. For this study, however, we expect that the more visible an identity with which the organization is compared to the outside world, the stronger the relationship is between PEP and identification. Hence the formulation of the following hypothesis:

- (3) Perceived external prestige has a greater influence on identification with the organization as a whole than on identification at lower organizational levels.

On the basis of differences in visibility between lower and higher order identities in an organization (Ashforth & Johnson, 2001), relationships found earlier between communication climate and organizational identification (Bartels et al., 2006; Scott et al., 1999; Smidts et al., 2001), and Reade’s (2001) findings that identification can be predicted best when matched with antecedents on the same level of abstraction within the organization, we expect that identification with part of an organization can be explained better by the communication climate within that organizational unit than by the communication climate of another unit. For this study the following hypotheses were thus formulated:

- (4a) Communication climate at work group level has a greater influence on identification with the work group than on identification with the department, the business unit or the organization as a whole.
- (4b) Communication climate at department level has a greater influence on identification with the department than on identification with the work group, the business unit or the organization as a whole.

Organizational Context

To test our hypotheses, we conducted a survey among members of a regional police organization in the Netherlands. This regional police force consists of 1100 employees (total research population). The organization's mission statement is to promote and support safety, quality of life and tolerance for civilians within the region, with honesty, professionalism and flexibility as core values in working ethics. The regional police organization has one central police station (Head Office) and 19 departments (local police stations). The police stations are functionally and administratively organized within three larger districts. At present, the organization's primary policy concerns are: a focused attention to youth-related criminality, to operate pro-actively in tracing suspects, and to accomplish stronger commitment from and to civilians in the region.

External Environment

In 2003 performance 'contracts' were introduced for all 26 Dutch regional police organizations by the Ministry of the Interior and Kingdom Relations. Based on these agreements, regions were committed to improve on several internal and external performance indicators (such as number of suspects taken into custody, satisfaction scores of civilians, organizational absenteeism etc.). In order to meet the terms of these agreements and to provide a basis for more efficiency within the organization, reorganization had taken place. This reorganization process provided the context for present study. The regional police organization (the subject of our study) managed to meet the terms of the agreement well, and to improve its performance significantly. In 2004 it was one of the safest regions in the Netherlands. The region was rated second best in satisfaction scores among civilians and availability of police servants to the public. Furthermore, the organization scored very low on employee absenteeism. Therefore it received an extra financial bonus from the Minister of the Interior and Kingdom Relations to continue and improve its current policy.

Time

The study was conducted in December 2003.

Method

Organizational context

In order to test the hypotheses a questionnaire study was carried out. The relationship between communication climate and several levels of organizational identification was investigated in various

organizational units of a regional police organization. This organization comprises three business units. Employees have dealings with four organizational levels: their work group, their department, their business unit and the organization as a whole. The organization itself comprises three geographical business units, each sub-divided into six departments. Finally, each department consists of several work groups which form the immediate vicinity for the employees' daily tasks. In total, 1100 questionnaires were sent out.

Procedure of data collection

This study made use of an electronic questionnaire and was conducted in December 2003. Employees received an e-mail from their immediate superior in which he/she gave a short description of the study and requested them to cooperate. Absolute anonymity was stressed and guaranteed in the introduction. Via a link at the bottom of the e-mail, employees accessed the questionnaire on intranet. Respondents had 1 week in which to reply. To increase the response, a reminder was sent out a week later, after which the respondents were given an extra week to complete the questionnaire.

Measurement instrument

Besides respondents' demographical background data, the questionnaire comprised three parts: (1) organizational identification, (2) communication climate and (3) perceived external prestige. All the items of the questionnaire could be answered on the basis of 5-point Likert scales.

As in the study by Bartels et al. (2006), two related scales were used for organizational identification. Organizational identification at work group level and department level was measured with 3-item scales based on Van Knippenberg, Van Knippenberg, Monden, and De Lima (2002). An example item was: 'I feel closely connected to my work group/department'. Both scales were sufficiently reliable (Cronbach's $\alpha_{\text{work group}} = 0.75$ and Cronbach's $\alpha_{\text{department}} = 0.82$). Identification at both business unit and organizational level was measured with 11 items based on Mael and Ashforth (1992) and Smidts et al. (2001). Example items were: 'If someone criticizes [name organization], I take it personally', 'I am very interested in what others think about [name organization]' and 'When I talk about [name organization], I usually speak of "we" and not "they"'. The reliability of the scales was high (Cronbach's $\alpha_{\text{business unit}} = 0.93$ and Cronbach's $\alpha_{\text{organization}} = 0.90$). The 3-item scale by Van Knippenberg et al. (2002), which was used to measure identification at work group and department level is a shorter version of the 11-item scale used to measure identification at business unit and overall organizational level. This was done to avoid a lengthy questionnaire with highly similar items. Bartels et al. (2006) proved both scales to be reliable.

Communication climate was measured with two 9-item scales based on Dennis (1974) and Smidts et al. (2001). Communication climate was sub-divided into: (1) climate work group level, and (2) climate department level. Example items were: 'Generally speaking, everyone at [name organization] is honest with one another', 'If I talk with colleagues at [name organization], I feel I am being taken seriously', and 'Colleagues at [name organization] genuinely listen to me when I say something'. The reliability of the communication climate scales was high (Cronbach's $\alpha_{\text{work group}} = 0.87$, Cronbach's $\alpha_{\text{department}} = 0.90$).

Perceived external prestige was measured with a 3-item scale based on Smidts et al. (2001). Scale items were: '[name organization] has a good reputation', '[name organization] is regarded as pleasant to work for', and 'When talking with family and friends about [name organization] they often display a positive attitude towards [name organization]'. The reliability of the scale was sufficient (Cronbach's $\alpha = 0.78$).

Sample and response

Of the total 1100 e-mails sent, 314 useful questionnaires were eventually returned. This was a response percentage of 29 per cent. Although several authors (Badger & Werret, 2005; Keeter & Miller, 2000; Krosnick, 1999) have claimed evidence that a response rate of 20–40 per cent should be accurate to be representative of the target group, we were disappointed with the high non-response rate. *Post hoc* inspection and interviews revealed that (1) the e-mail-database was poorly up-dated and (hence) there was a considerable number of 'blind targets' in the sample; (2) 2 weeks time for response might have been too short for a population of policemen that is frequently involved in long-term fieldwork projects or external training, during which they hardly appear to use internet.

Respondents had the following demographical characteristics: 60 per cent was older than 40 years, the ratio male/female was 4:1, 80 per cent of the respondents had been employed there for more than 5 years, 20 per cent had a college degree. These demographics are representative of the composition of this regional police organization (as was checked by means of the 'Annual Report' and the 'Annual Central Data' (Ministry of Home Office and Royal Affairs, 2004a,b) of the police organization.

Results

Descriptives

Table 1 shows the means, standard deviations and correlations of all variables. What is striking is that the means are reasonably high and also that all variables correlate with one another. For example, if employees identify themselves with their work group, they also identify with the department to which the work group belongs. The relationship between work group identification and department identification and the relationship between business unit identification and organizational identification appears to be the strongest. Perceived external prestige appears to correlate the strongest with organizational identification and lesser so with identification at other organizational levels. Communication climate correlates with identification at the various organizational levels. What catches the eye here, is that communication climate at work group level correlates the strongest with

Table 1. Means, standard deviations and correlations between various levels of identification and communication climate (N = 314)

Variables	Mean	(SD)	1	2	3	4	5	6	7
Perceived external prestige	3.79	(0.44)	—						
Organizational identification	3.65	(0.51)	0.51**	—					
Business unit identification	3.37	(0.64)	0.22**	0.53**	—				
Department identification	3.77	(0.70)	0.13*	0.34**	0.38**	—			
Work group identification	3.46	(0.69)	0.15**	0.36**	0.37**	0.55**	—		
Communication climate at department level	3.78	(0.52)	0.19**	0.25**	0.17**	0.51**	0.53**	—	
Communication climate at work group level	3.84	(0.53)	0.17**	0.22**	0.11*	0.44**	0.55**	0.83**	—

*Correlations are significant at $p < 0.05$ (2-sided), 5-point Likert scales were used for all scales.

**Correlations are significant at $p < 0.01$ (2-sided).

identification at work group level. Communication climate at department level correlates strongly with both identification at department level and identification at workgroup level.

Due to the high mutual correlations between the communication climate at work group and department level, it was decided to inspect the risk of common method bias before testing the ultimate model. A number of techniques were used to find out if the measured constructs consisted of one joint factor, or as was expected, of more factors. First, a Harman's single-factor test was carried out by conducting an exploratory factor analysis for all used items in the study. This is the most commonly used test to discover common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The exploratory factor analysis showed that there were clearly more factors responsible for the explained 69 per cent variance. Subsequently, in the Amos program (Arbuckle, 2003), and by means of a confirmatory factor analysis (CFA), it was investigated whether all measured constructs yielded a one-dimensionally fitting model. CFA showed that this was by no means the case ($\chi^2 = 287.11$, $p = 0.00$; $GFI = 0.78$; $CFI = 0.70$; $TLI = 0.55$; $RMSEA = 0.25$). Since the correlation between communication climate at work group and department level turned out to be the strongest, a model was tested in which communication climate was seen as one-dimensional. If both communication climate scales (at work group and department level) were combined as predictor in the model to form one construct, the model did not fit ($\chi^2 = 22.59$, $p = 0.00$; $GFI = 0.98$; $CFI = 0.96$; $TLI = 0.89$; $RMSEA = 0.11$). So, despite the strong correlation between both scales for communication climate, the two dimensions for communication climate (at work group and department level) are used for subsequent analyses.

Testing the expected model

Structural equation modelling was then used to test Hypotheses 1–4. In Amos, a path analysis was carried out to chart the expected indirect and direct effects. Figure 1 shows an overview of the latent

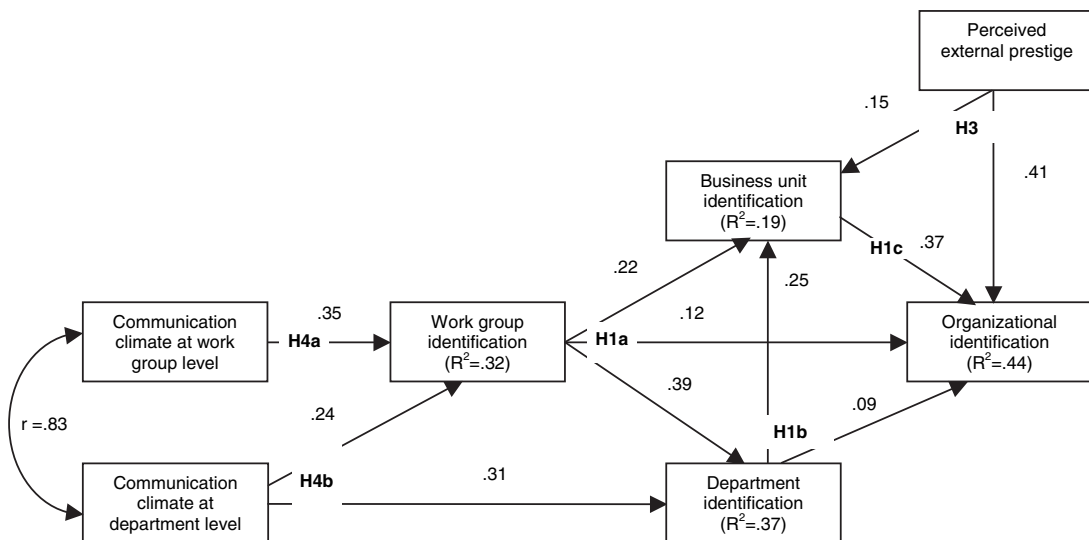


Figure 1. Relationship between communication climate, perceived external prestige and identification.

Note: Parameters above the arrows represent standardized coefficients (Betas)

variables that influence the dependent variable, overall organizational identification. All shown relationships between the variables are significant at $p < 0.05$ with the exception of the relationship between department identification and organizational identification ($p = 0.10$). First a comparison was made between the model with and without PEP. Both models showed a reasonable fit. Although the model without PEP fitted slightly better ($\chi^2 = 12.85$, $p = 0.025$; $GFI = 0.98$; $CFI = 0.99$; $TLI = 0.97$; $RMSEA = 0.071$) than the model with PEP ($\chi^2 = 26.21$, $p < 0.05$; $GFI = 0.98$; $CFI = 0.98$; $TLI = 0.96$; $RMSEA = 0.078$), the sufficiently fitting model with PEP was used to test the hypotheses.

As can be seen in the Figure, Hypothesis 1a was confirmed. Work group identification is the strongest direct predictor of department identification, a less strong predictor of business unit identification, and an even less strong predictor of overall organizational identification. Hypothesis 1b was partly confirmed. Department identification is the strongest predictor of business unit identification and only a marginally significant predictor of overall organizational identification. Business unit identification appeared a strong predictor of overall organizational identification. Hypothesis 1c was thus confirmed. There is a positive relationship between employee identification at work group, department, business unit and organizational level, whereby the relationships are stronger between the more closely related organizational levels than between those levels that are further apart.

Fisher's Z-tests were conducted to compare regression weights for Hypothesis 2. Three of the four comparisons were significant at $p < 0.05$. The only relationship that did not differ significantly was between work group identification and the two highest organizational levels of identification. The Fischer's Z-test did not confirm that the relationship between work group and business unit identification ($\beta = 0.22$) was stronger than the relationship between work group and organizational identification ($\beta = 0.12$), despite the higher β coefficient in the model. Hypothesis 2 could thus be confirmed for the majority of the comparisons, and we may indeed conclude that there exists a stronger correlation between identifications with more closely related organizational levels than between identifications with levels that are further apart from each other.

Perceived external prestige has a greater influence on overall organizational identification than on business unit identification. PEP causes an increase of the explained variance of overall organizational identification from 32 per cent to 44 per cent, whereas the explained variance of business unit identification increases by only 1 per cent. PEP has no significant influence on department and work group identification. Hypothesis 3, in which it was posited that PEP has more influence on identification with the organization as a whole than on identification with lower organizational levels is hereby confirmed. Fisher's Z-test showed a significant difference between the two regression weights ($\beta = 0.14$; $\beta = 0.41$) at $p < 0.01$.

Hypothesis 4a, in which it was posited that communication climate at work group level is a stronger predictor of identification at work group level than of identification at other organizational levels was also confirmed by the findings. Figure 1 shows that communication climate at work group level is a significant direct predictor of work group identification. Communication climate at work group level had no direct or only an indirect influence on identification with the other organizational levels (department, business unit and the organization as a whole).

Finally, Hypothesis 4b was partly confirmed. Communication climate at department level has indeed a greater influence on department identification than on business unit identification and identification with the organization as a whole (the latter two relationships are non-existent, as can be seen in Figure 1). Comparing the influence of communication climate in the department on department identification to its influence on work group identification, the difference between the two regression weights ($\beta = 0.31$; $\beta = 0.24$) was in the expected direction. The Fisher's Z-test failed to reach significance, however.

Discussion

Major conclusions

The major conclusion of our study is that organizational identification and communication climate are multiple concepts. Following Ashforth and Johnson (2001), there would also appear to be a connection between employee identification at work group, department, business unit and organizational level. The findings of this study confirm earlier ones in which positive connections were found between organizational identification at various organizational levels (Baruch & Winkelmann-Gleed, 2002; Bartels et al., 2006; Scott, 1997; Scott et al., 1999). The results of this present study appear to show that not only are there positive connections between identification at various organizational levels, but also that these correlations increase in strength the more closely the organizational levels are related.

With regard to communication climate it can be said that at a certain organizational level it need not per definition have the same impact on identification at other organizational levels. In other words, the appraisal of a pleasant working atmosphere in one's work group or within one's department does not necessarily imply that one identifies oneself strongly with the organization as a whole. Indeed, communication climate appears mainly to have a strong influence on identification with the specific sub-identity of the organization in which the communication takes place. A clearly positive relationship between communication climate and organizational identification thus appears to exist. This confirms the study of Smidts et al. (2001). This relationship could however be refined more than has been empirically investigated to date. Apparently, with employees' identification with the organization as a whole, other factors play a role than with work group or department identification (e.g. Reade, 2001). As expected, external factors such as PEP appear to have a greater influence on overall organizational identification whereas internal factors, such as perception of the internal communication, appear to have a greater influence on identification with close-related organizational levels such as the work group and the department. In short, this study has increased the insight into the relationship between sub-identities in organizations, refined the notion of the influence of communication climate on identification and confirmed the influence of PEP on identification at higher levels of the organization.

Management implications

As employees' organizational identification influences behaviour that is conducive to the organization, it is vital that managers gain insight into the antecedents of identification. Managers should take into account the fact that an organization can be composed of a variety of identities. Identifying oneself with a specific work group, such as the one in which one works daily, is clearly different from identification with the possibly further removed organization as a whole. It appears that when a person identifies him/herself strongly with the work group, this has positive consequences on identification with other, more remote organizational levels. Management should thus be aware of the presence of identities at and employees' identification with different organizational levels.

Perceived external prestige is important for creating a kind of overall feeling of oneness or team spirit. If employees have the idea that their organization is seen by the outside world in a positive light, this will yield a certain degree of pride. Employees are then all too willing to pursue the mission and goals of the organization. Communicating both the organization's outside achievements and the appreciation of the outside world on its importance as an organization might well augment the overall organizational identification.

In order to achieve stronger identification, internal communication management should concentrate more on the quality of the work groups and departments within the organization. After all, perception of the communication climate at these levels of the organization appears to be a strong predictor of a sense of involvement. Indirectly this will eventually yield a relevant contribution to the involvement of the employees with the entire organization.

If management wishes to influence organizational identification through a bottom-up process, it is thus wise to consider monitoring the communication climate in the work groups. When influencing organizational identification with the organization as a whole, it is better to emphasize in communications the degree to which the organization—in the employees' eyes—is positively regarded by the outside world (PEP).

Restrictions of the study

A serious restriction is the cross-sectional nature of this study. The variables in this research were measured at one given moment. This implies that the present results represent a specific situation in time. Although the results would seem to confirm most of the hypotheses, one must be careful when interpreting the results with regard to the causality of correlations found.

As is often the case with such questionnaire research, the nature of the collected data is restrictive. All constructs were measured on the basis of the respondents' self-reporting. All the questions referred to the employees' personal perception. The results of this study are thus dependent on the degree to which employees can assess how for example the outside world views their organization.

A third restriction is the fact that only one organization was involved in this study. In order to get a better idea of the multidimensional relationships between communication climate, PEP and organizational identification, it is necessary to conduct research in more organizations. It must be said, however, that in earlier studies, in which other organizations were involved, roughly the same relationships were observed (Carmeli & Freund, 2002; Iyver et al., 1997; Smidts et al., 2001).

Finally, in research on identification there appears to be a growing interest in the visibility of a certain identity: identity salience (Callero, 1985; DeGarmo & Forgatch, 2002; Haslam, Oakes, Reynolds, & Turner, 1999; Randel, 2002; Shapiro, Furst, Spreitzer, & Von Glinow, 2002; Van Dick, Wagner, Stellmacher, & Christ, 2005). In the present study, we measured identification at different organizational levels. We assumed that if employees identified stronger with a certain organizational level, this level was more salient to them. We did, however, not explicitly measure identity salience.

Future research

This study approaches communication climate as a multidimensional construct. This is in line with Postmes (2003), who sees communication as a mix of complex multidimensional constructs. In two organizational levels, communication climate was measured according to Dennis's (1974) dimensions of communication climate. The emphasis in this research was more on the sub-division of communication climate in various organizational levels than on the intrinsic multidimensionality of Dennis's dimensions. It is possible that if the intrinsic dimensions of communication climate were taken more into account, a greater distinction of the influence of communication climate at various organizational levels would become apparent.

For PEP, too, a more refined image would arise if in future research it was approached as a multidimensional construct. In large, complex organizations it is feasible for differences to exist between departments or divisions on the way one sees one another. It is quite possible that at another

organizational level than the overall one, PEP has an influence on different sub-identities in the organization. In other words, employees might well find it not only important how the outside world sees them (the organization), but also how the outside world sees their role in that organization: their work group or department. One could therefore consider extending the measurement of reputation by introducing PIP, the perceived *internal* prestige.

If the presence of various kinds of PIP in organizations were to be taken as a starting point, it is quite feasible that insight into the visibility of internal 'we-they'-relations will become more important. Van Dick et al. (2005) argue that salience of a certain organizational identity or level could lead to acting according the norms of this specific organizational level. These norms could differ from norms of the umbrella organization. So, in order to answer the question how employees are able to compare a closely related identity of their own work group with an identity further removed in the organization, it will be interesting in future research to specifically ask after the visibility of a certain identity for employees.

To conclude, it would also appear of interest in future organizational research to consider organizations more as a melting pot of multiple identities. In this day and age, with its short-term relationships between employees and organizations, the notion that organizations are holistic entities appears to fall short of the reality in organizations.

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